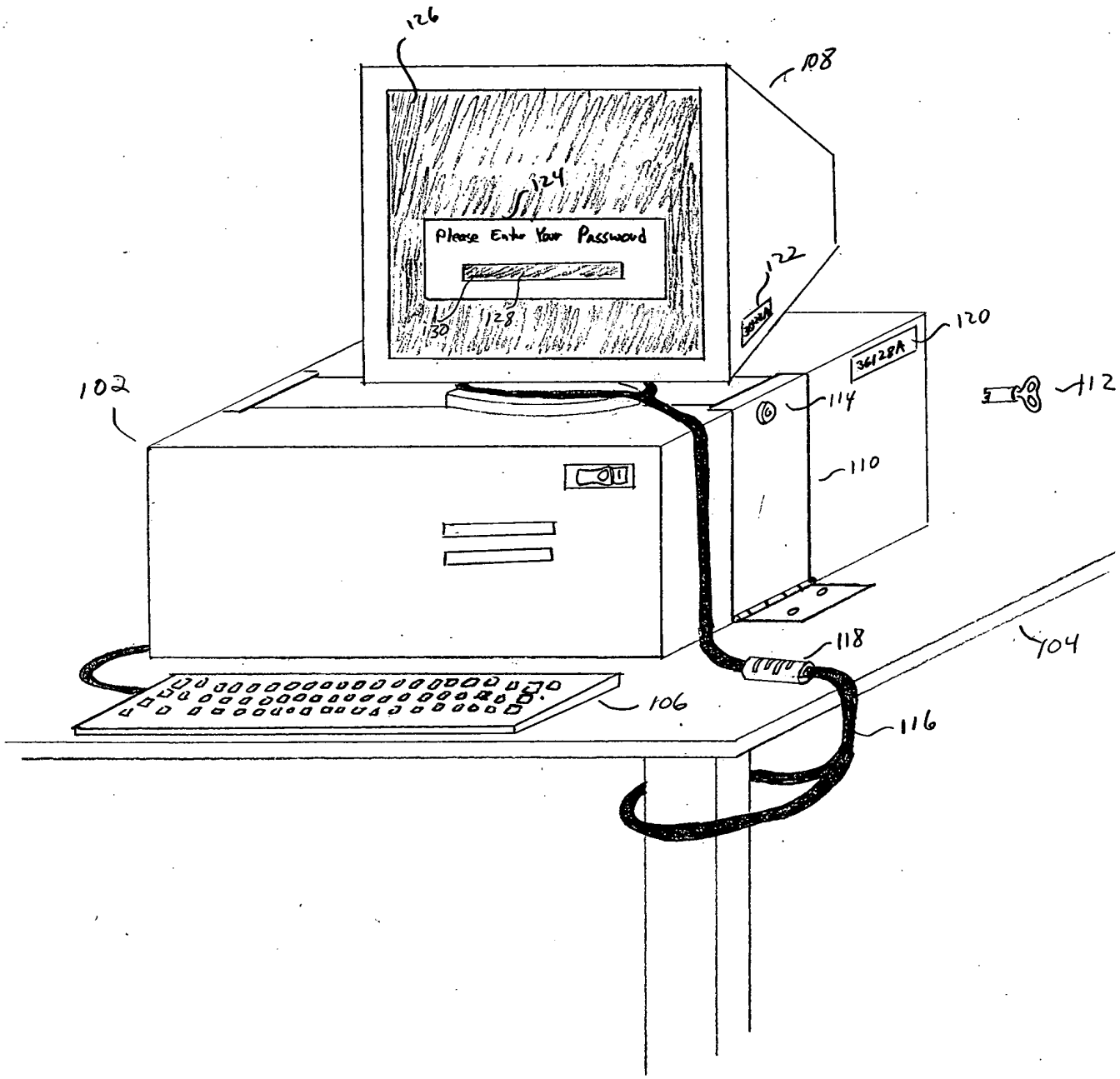
Figure1



09153094 "060260

21

Figure 2

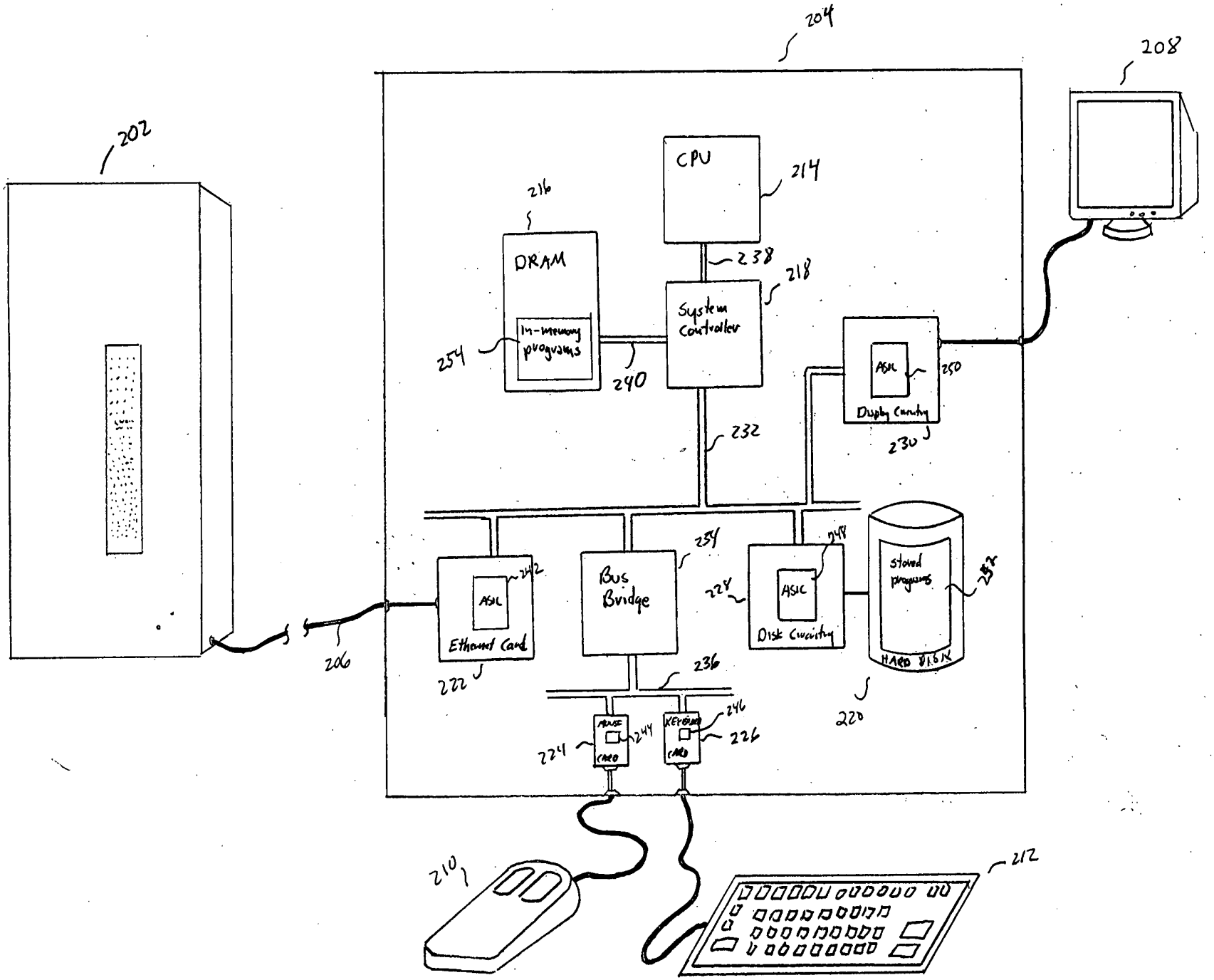

204
208
202
CPU
214
216
DRAM
238
218
System Controller
In-memory programs
254
240
ASIC
250
Display Circuitry
230
232
ASIC
242
Ethernet Card
222
206
Bus Bridge
234
ASIC
248
228
Disk Circuitry
stored programs
252
HARD DISK
220
236
MOUSE CARD
244
224
KEYBOARD CARD
246
226
210
212

Figure 3

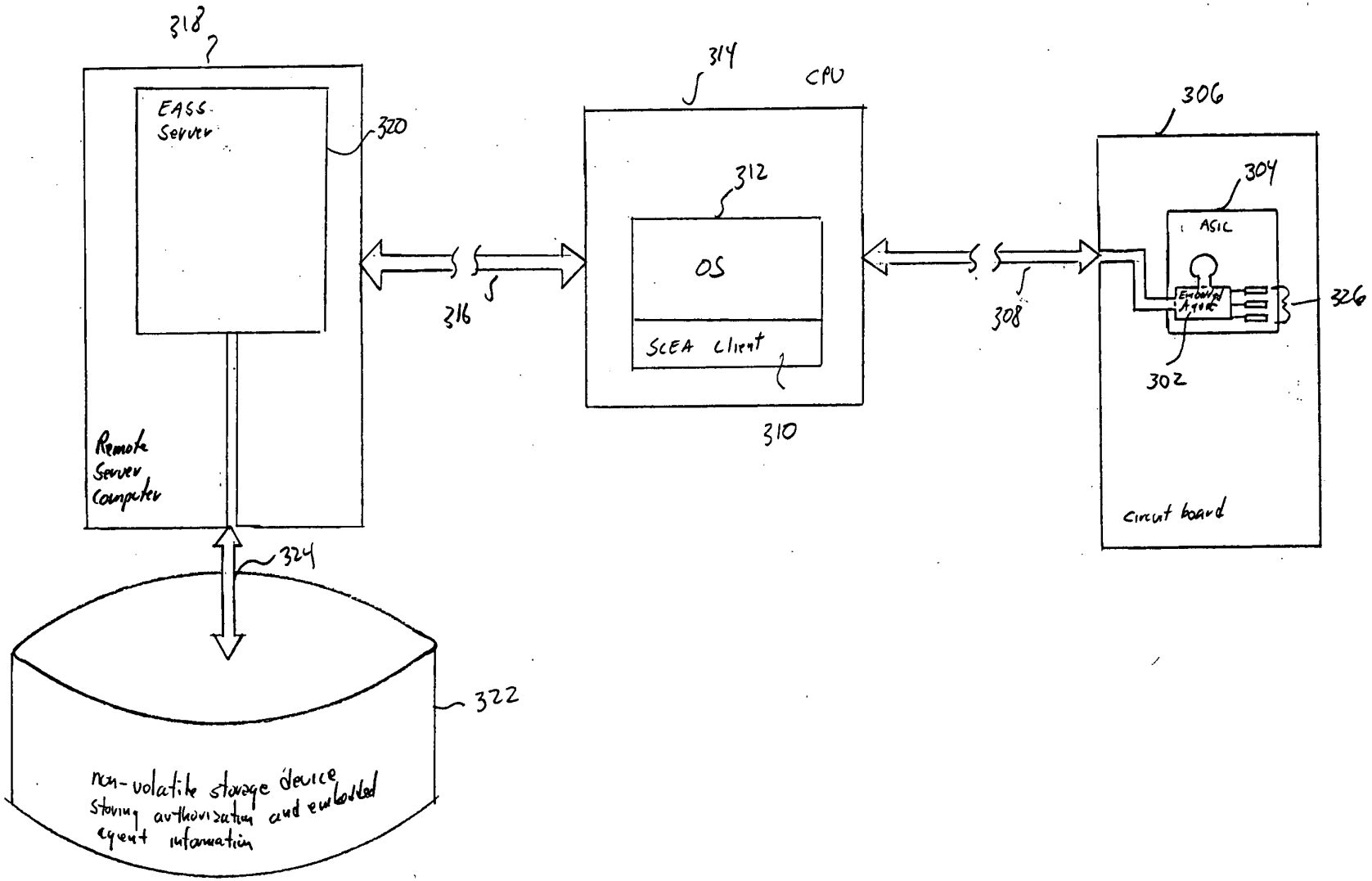

318
EASS Server
320
Remote Server Computer
316
314
CPU
312
OS
SCEA client
310
306
304
ASIC
Embedded Agent
326
308
302
circuit board
324
322
non-volatile storage device storing authorization and embedded agent information

Figure 4

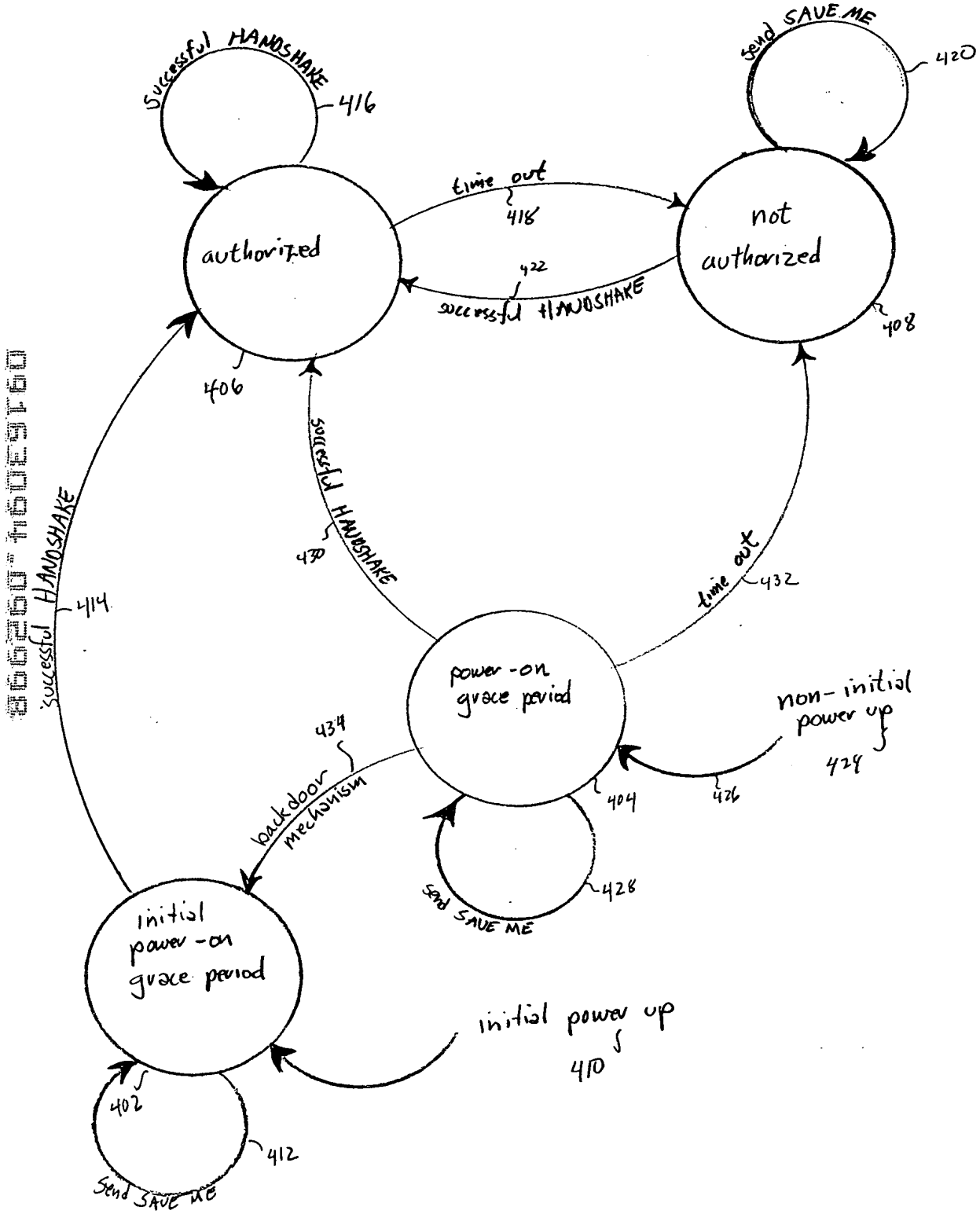

successful HANDSHAKE
416
send SAVE ME
420
time out
418
authorized
not authorized
422
successful HANDSHAKE
406
408
successful HANDSHAKE
430
time out
432
successful HANDSHAKE
414
power-on grace period
non-initial power up
424
434
backdoor mechanism
404
426
428
send SAVE ME
initial power-on grace period
initial power up
410
402
412
send SAVE ME

Figure 5

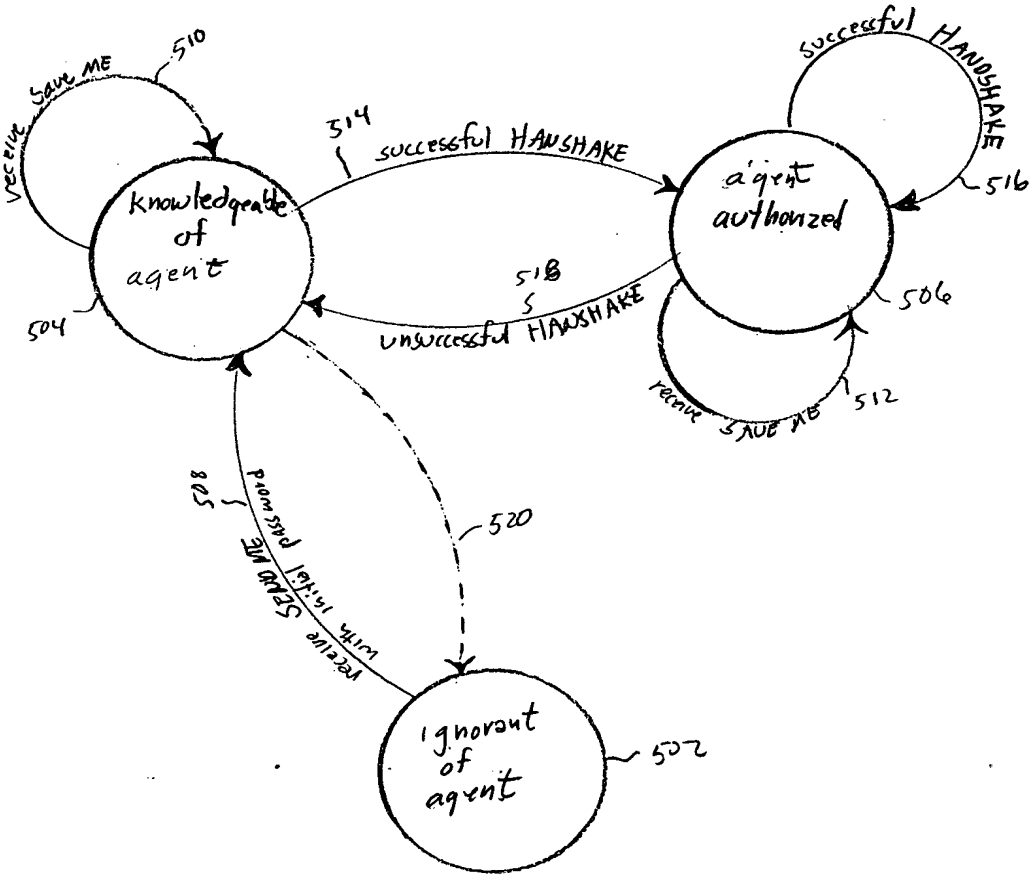

receive SAVE ME
510
successful HANDSHAKE
514
knowledgeable of agent
agent authorized
successful HANDSHAKE
516
518
unsuccessful HANDSHAKE
504
506
receive SAVE ME
512
SEND ME with initial password
508
520
ignorant of agent
502

Figure 6A

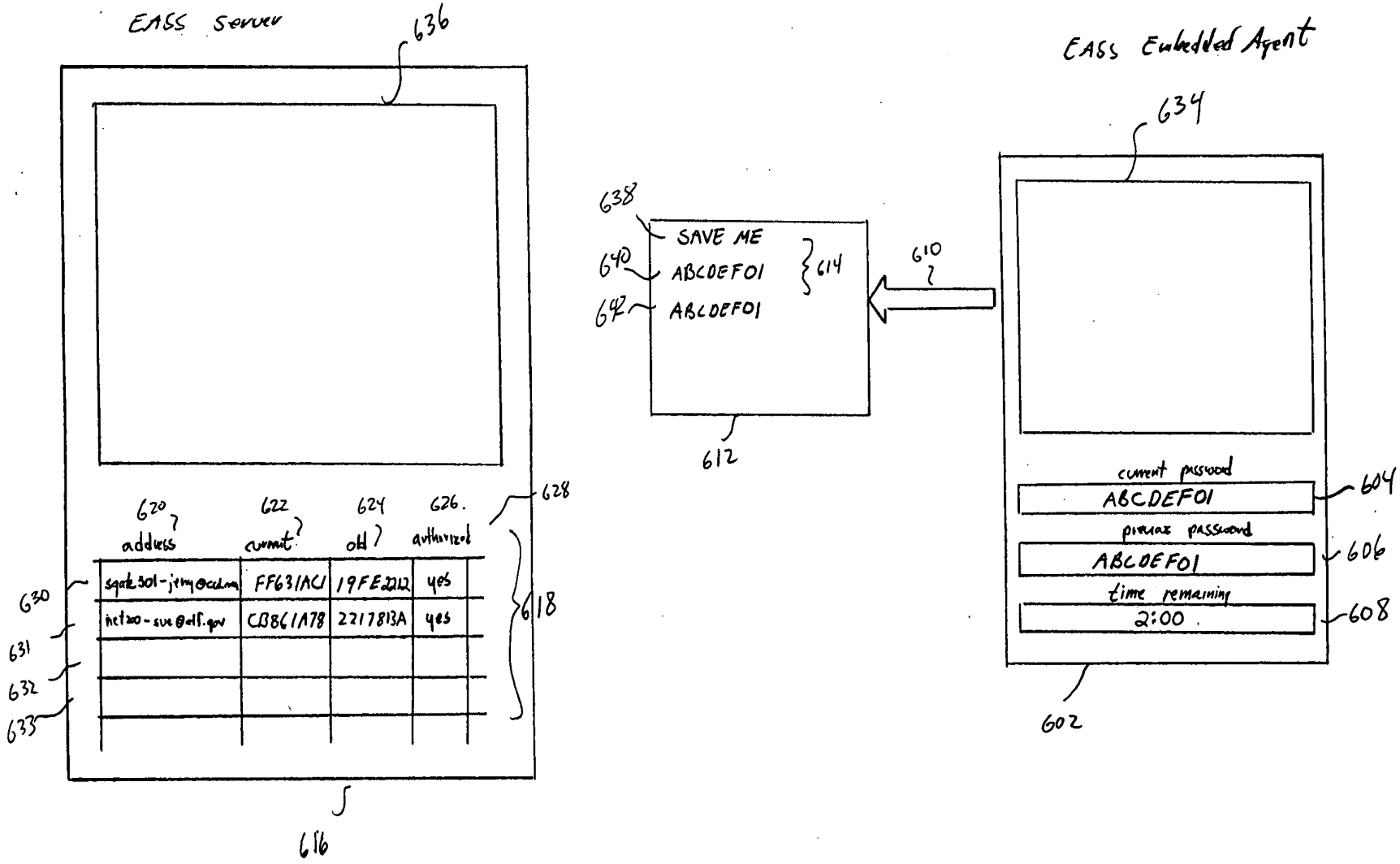
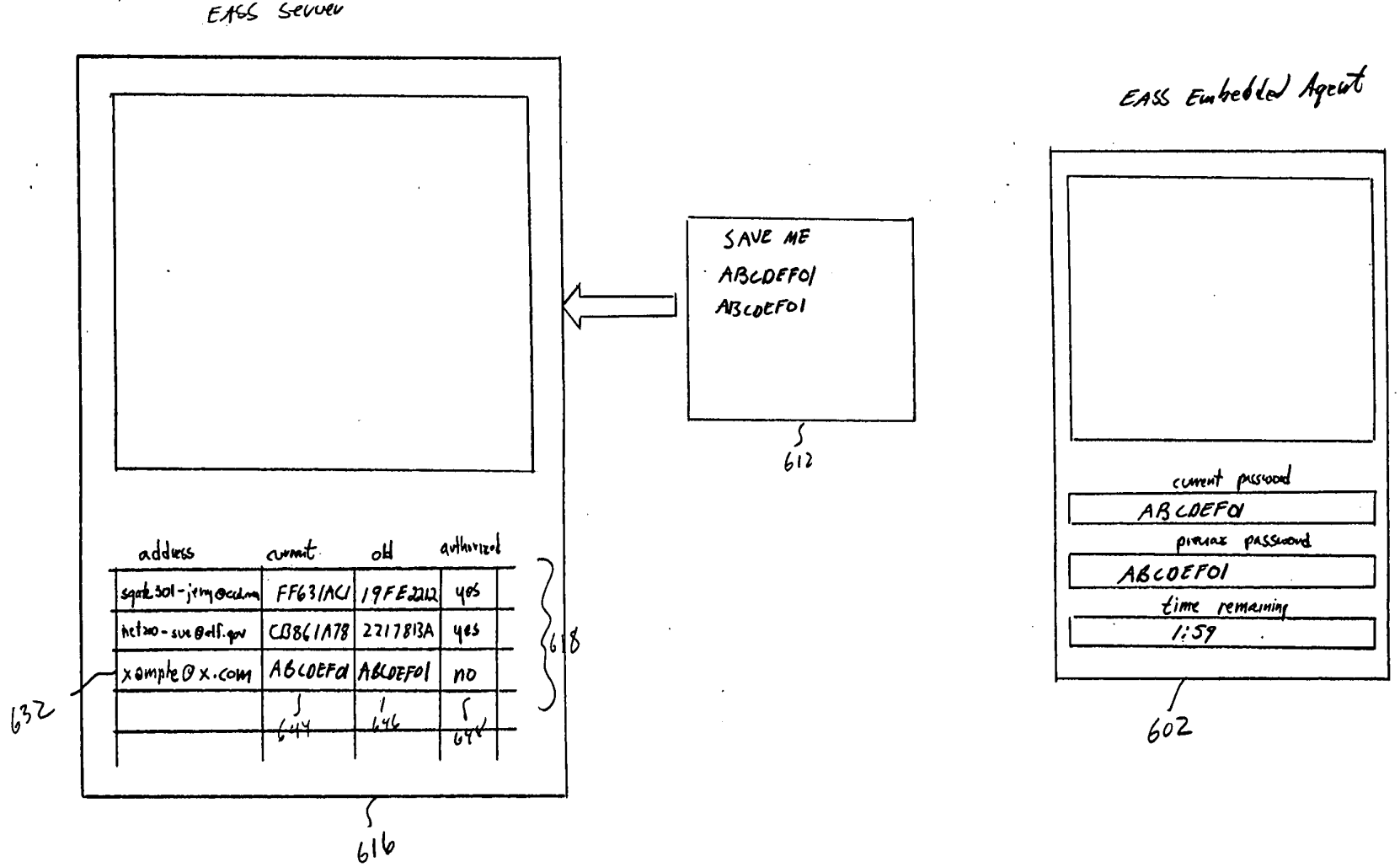
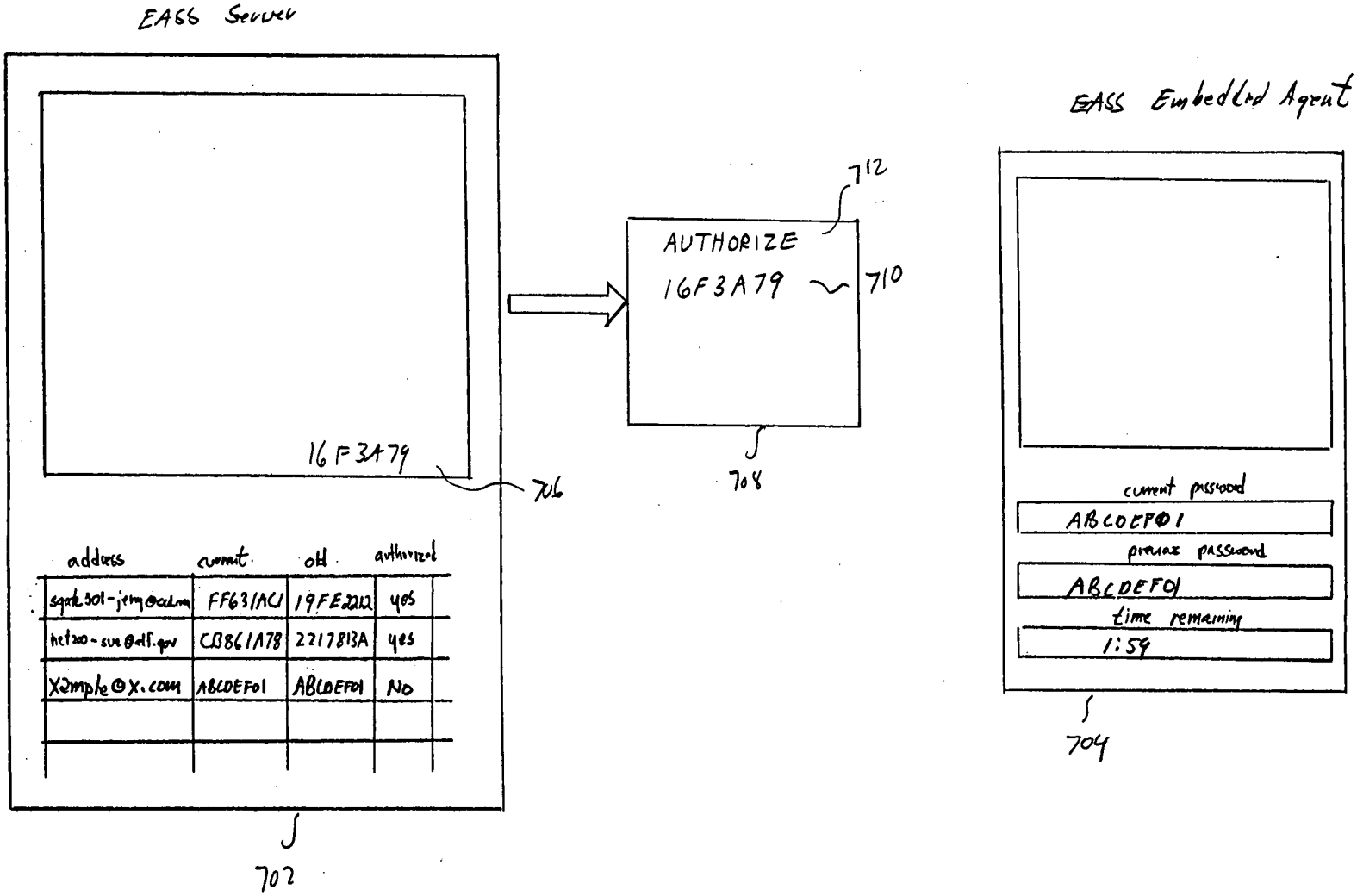

EASS Server
636
620
address
622
current
624
old
626
authorized
628
sgark301-jrmy@ccdmail
FF631AC1
19FE2212
yes
ncfxo-sve@elf.gov
CB3B61A78
2217813A
yes
630
631
632
633
618
616
638
SAVE ME
640
ABCDEF01
642
ABCDEF01
614
612
610
EASS Embedded Agent
634
current password
ABCDEF01
604
previous password
ABCDEF01
606
time remaining
2:00
608
602

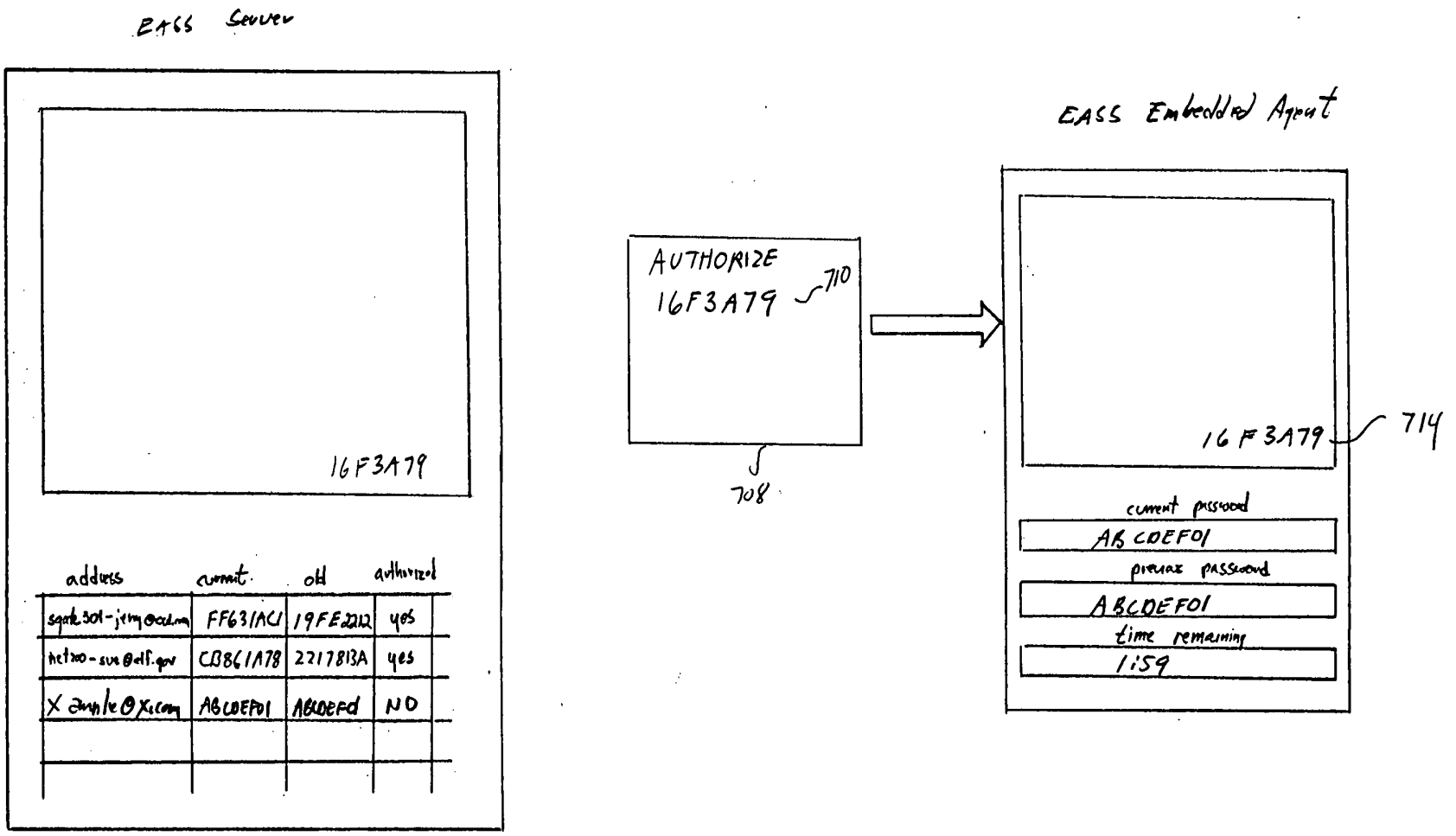
Figure 6B


EASS Server
SAVE ME
ABCDEF01
ABCDEF01
612
address
current
old
authorized
sgatk301-jrm@ccims
FF631AC1
19FE2212
yes
net20-sue@atf.gov
CB861A78
2217813A
yes
xample@x.com
ABCDEF01
ABCDEF01
no
632
644
646
648
618
616
EASS Embedded Agent
current password
ABCDEF01
private password
ABCDEF01
time remaining
1:59
602

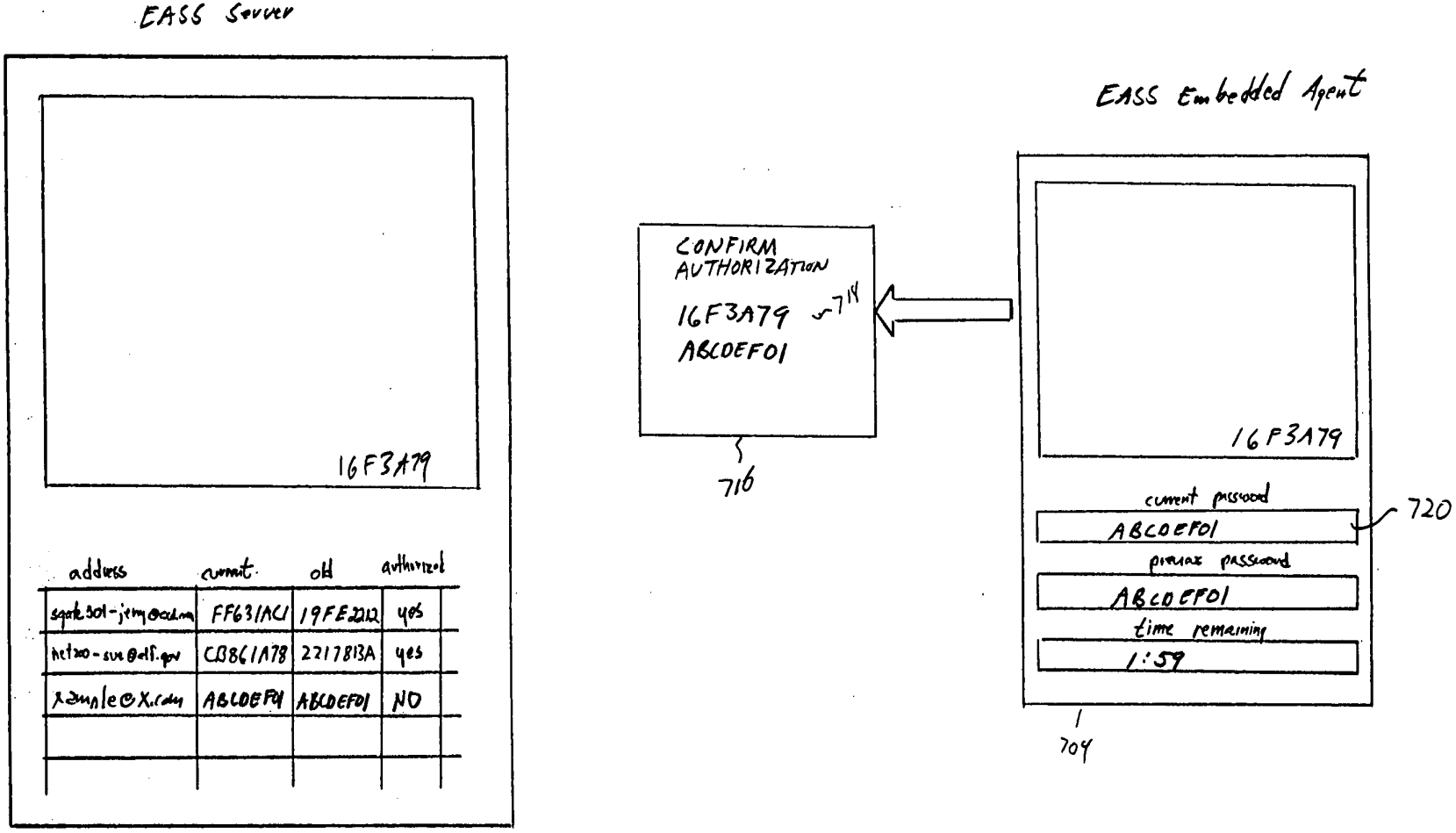
866260 "160E9T60



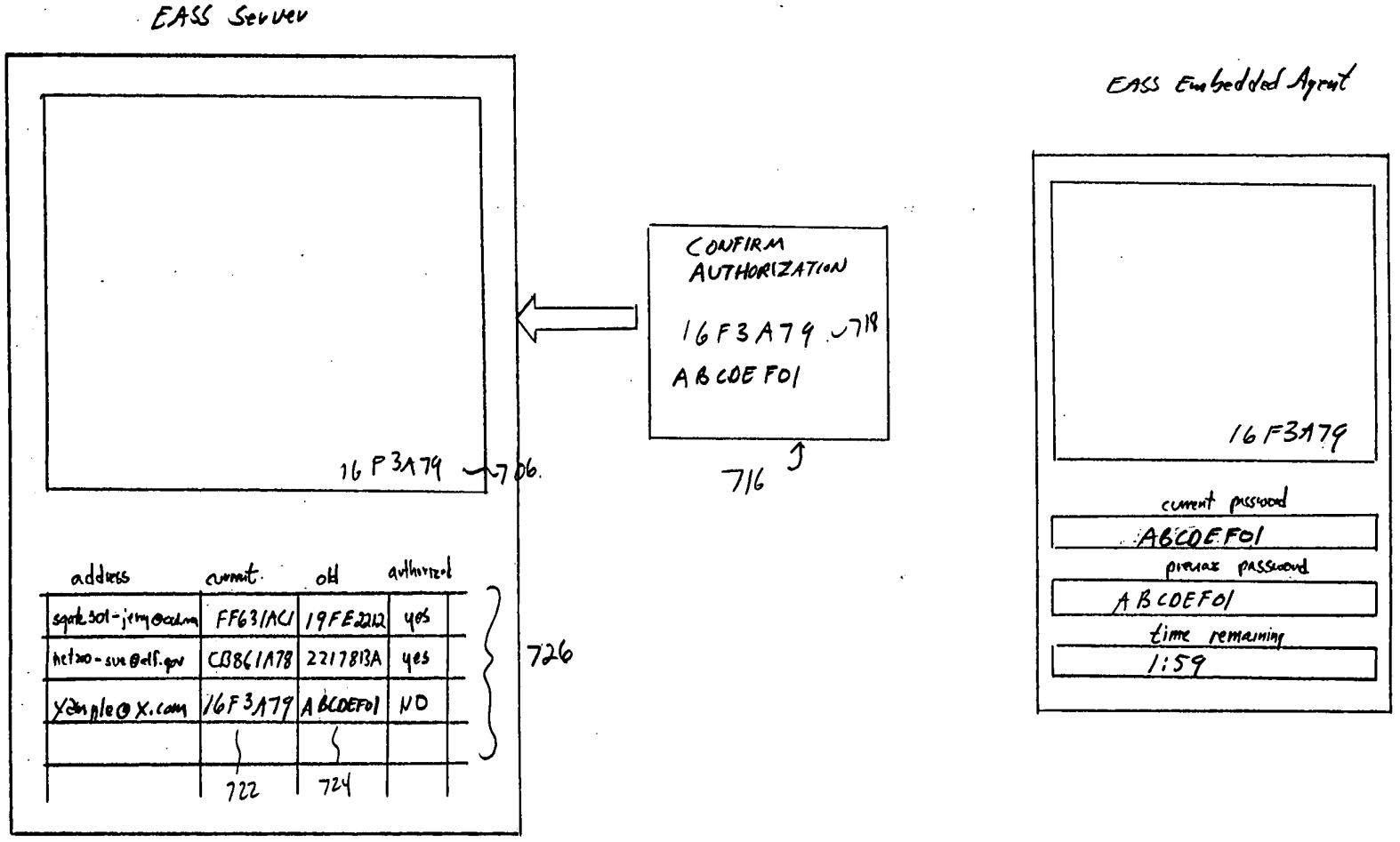
886260 "460E9T60



866260 "h60E960



866260 - 4605960



7E
866260 16DE9160

EAGS Server

address	current	old	authorized
spark301-jem@acdm	FF631AC1	19FE2212	yes
net20-sue@alf.gov	CB861A78	2217813A	yes
x2mple@X.com	16F3A79	ABCDEF01	NO

OK
16F3A79
120:00

728

EAGS Embedded Agent

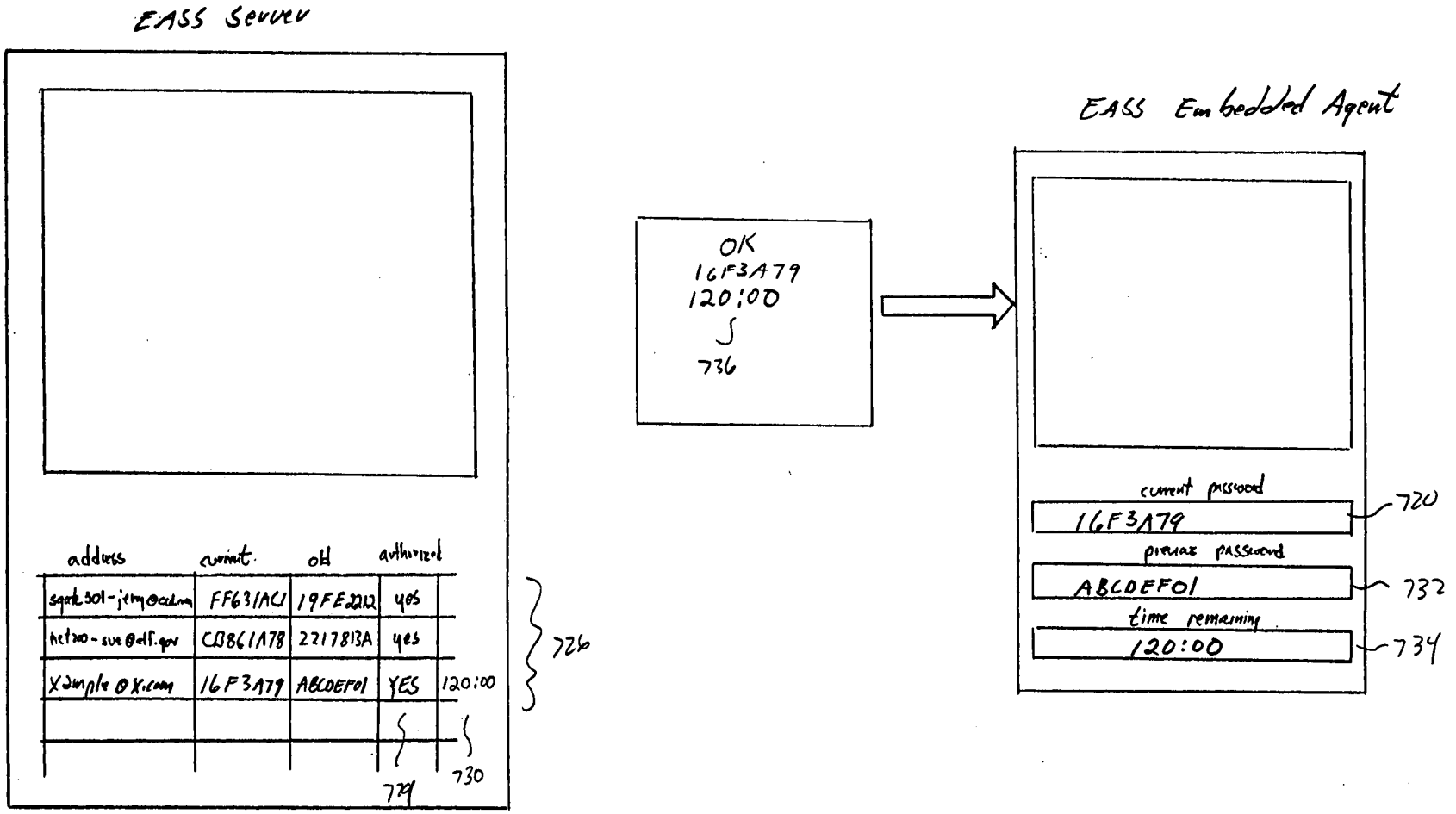
16F3A79

current password
ABCDEF01

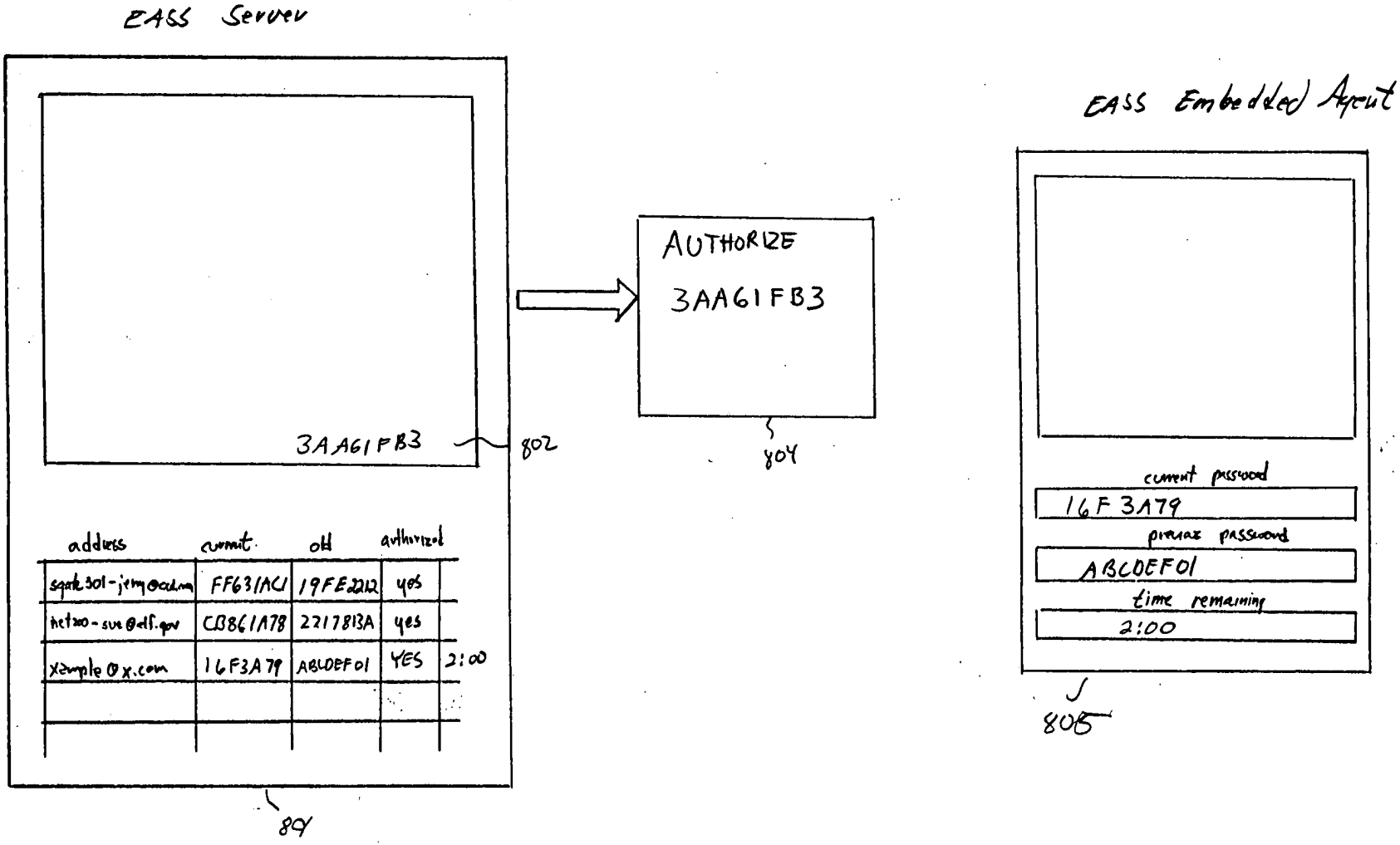
previous password
ABCDEF01

time remaining
1:58

866260 "h60E9T60



866260 "60E960



EAGS Server

3AA61FB3

address	current	old	authorized	
spark.301-jem@acl.mil	FF631AC1	19FE2212	yes	
network-sue@dtf.gov	C3B61A78	2217813A	yes	
Xample@x.com	16F3A79	ABCDEF01	YES	2:00

EAGS Embedded Agent

AUTHORIZE
3AA61FB3

804

3AA61FB3 806

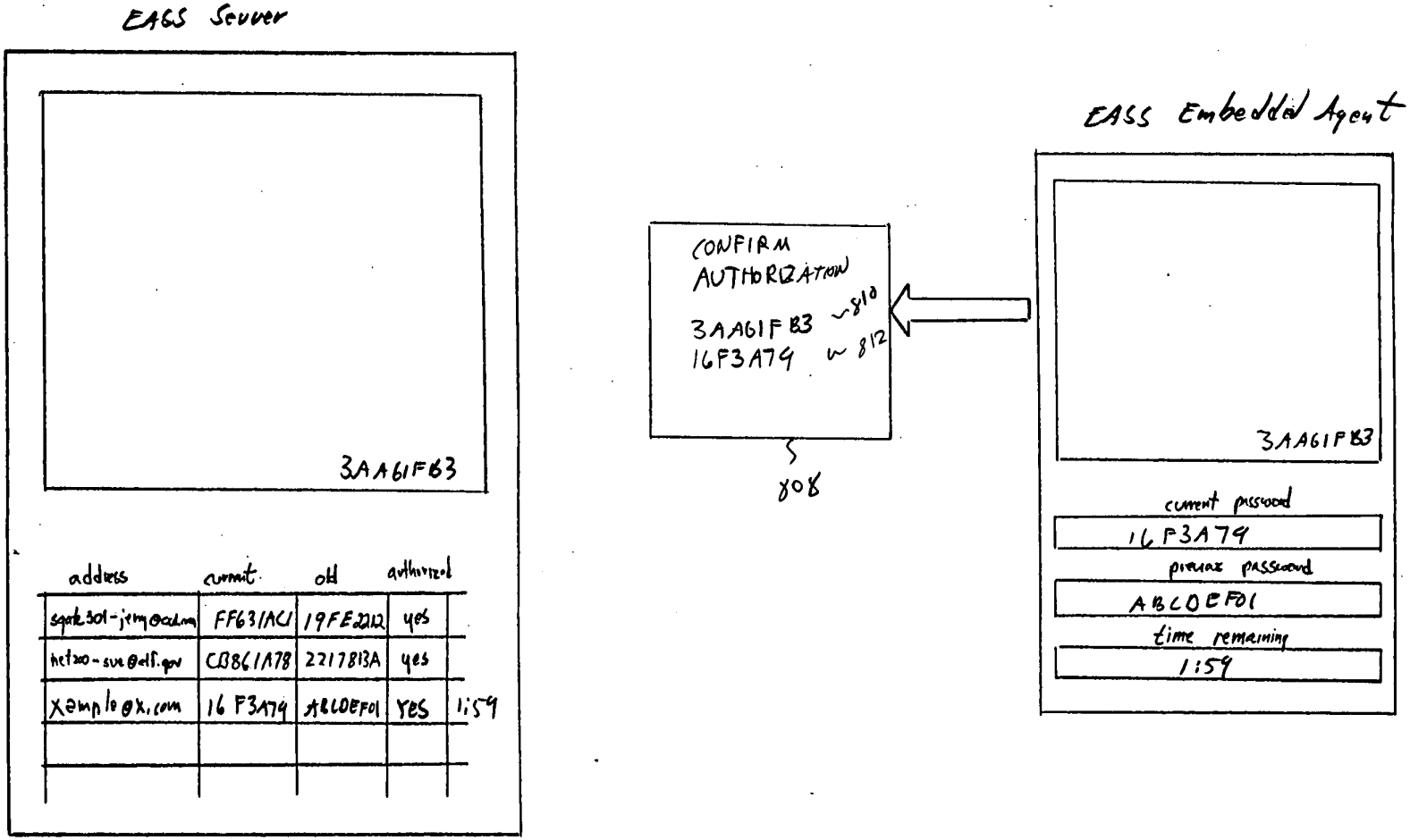
current password
16F3A79

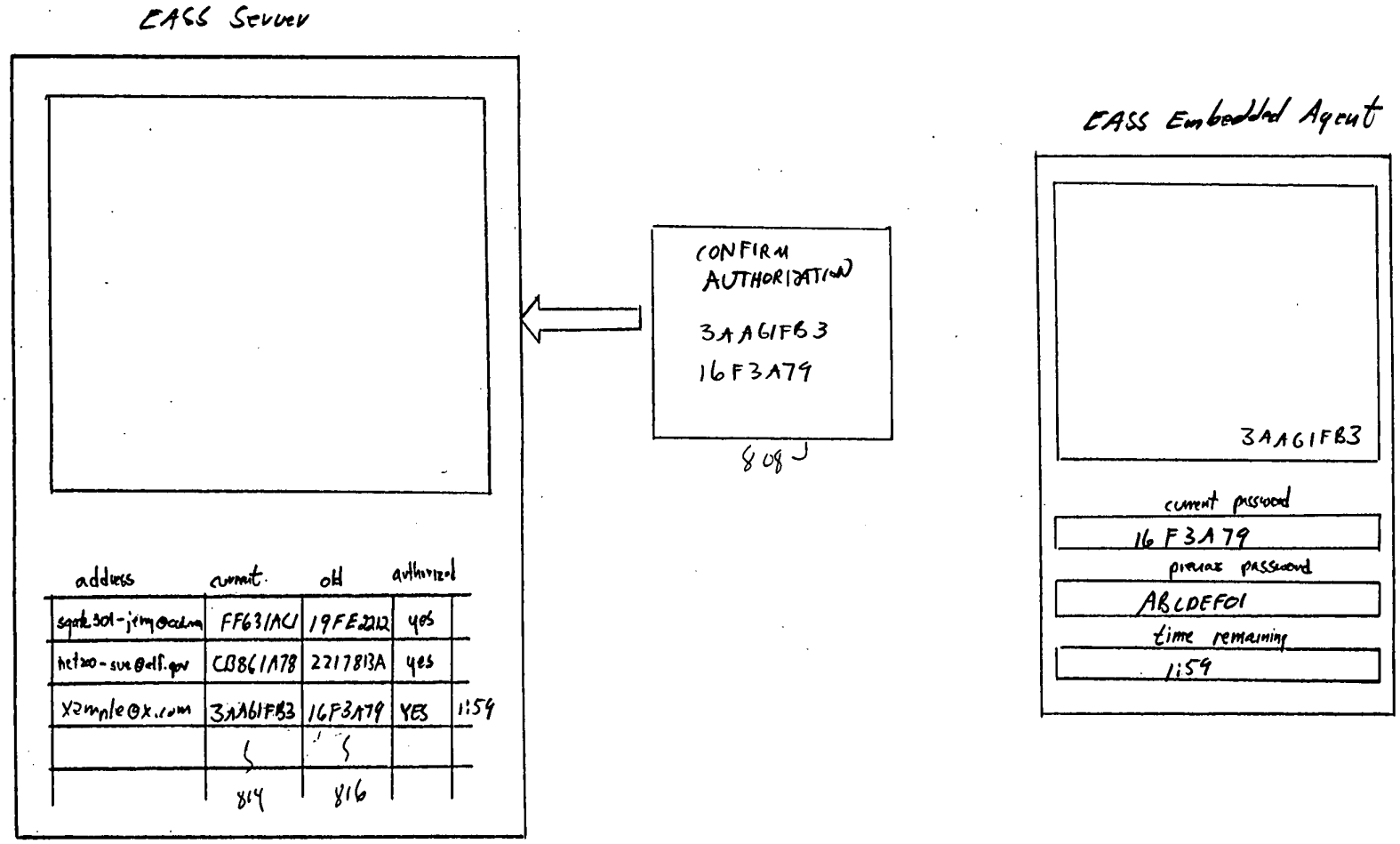
previous password
ABCDEF01

time remaining
2:00

6C

866260 h60E9T60

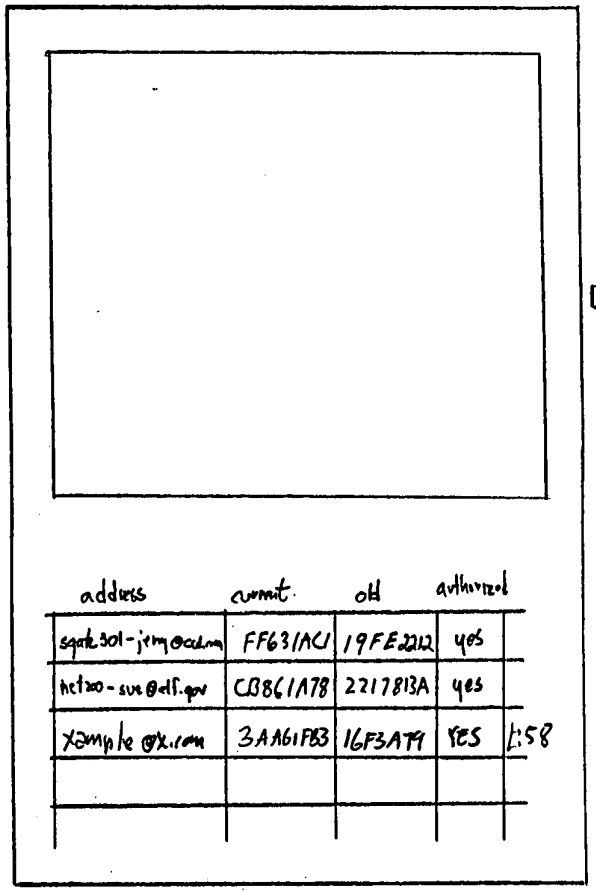



EASS Server
CONFIRM AUTHORIZATION
3AAG1FB3
16F3A79
808
address
current
old
authorized
sqrk.301-jrm@acl.m
FF631AC1
19FE2212
yes
net20-sue@atl.gov
C3B61A78
2217813A
yes
X2mple@x.com
3AAG1FB3
16F3A79
YES
1:59
814
816
EASS Embedded Agent
3AAG1FB3
current password
16F3A79
previous password
ABCDEF01
time remaining
1:59

8E

866260 "h60E91.60

EASS Server

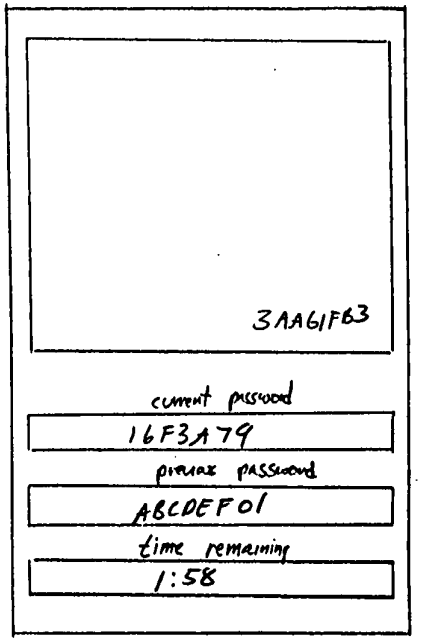


address	current	old	authorized	
sgark.301-jrm@acl.mil	FF631AC1	19FE2212	yes	
hct200-sue@dlf.gov	CB861A78	2217813A	yes	
xample @x.com	3AA61FB3	16F3A79	YES	1:58

OK
3AA61FB3
120;00 ~ 819

618

EASS Embedded Agent



8F

866260 "h60E9T60

EASS Server

address	current	old	authorized	
spark301-jerry@acd.com	FF631AC1	19FE2212	yes	
hetzo-sue@dlf.gov	CB861A78	2217813A	yes	
X2ample@X.com	3AA61FB3	1LF3A79	YES	120:00

820

OK
3AA61FB3
120:00

818

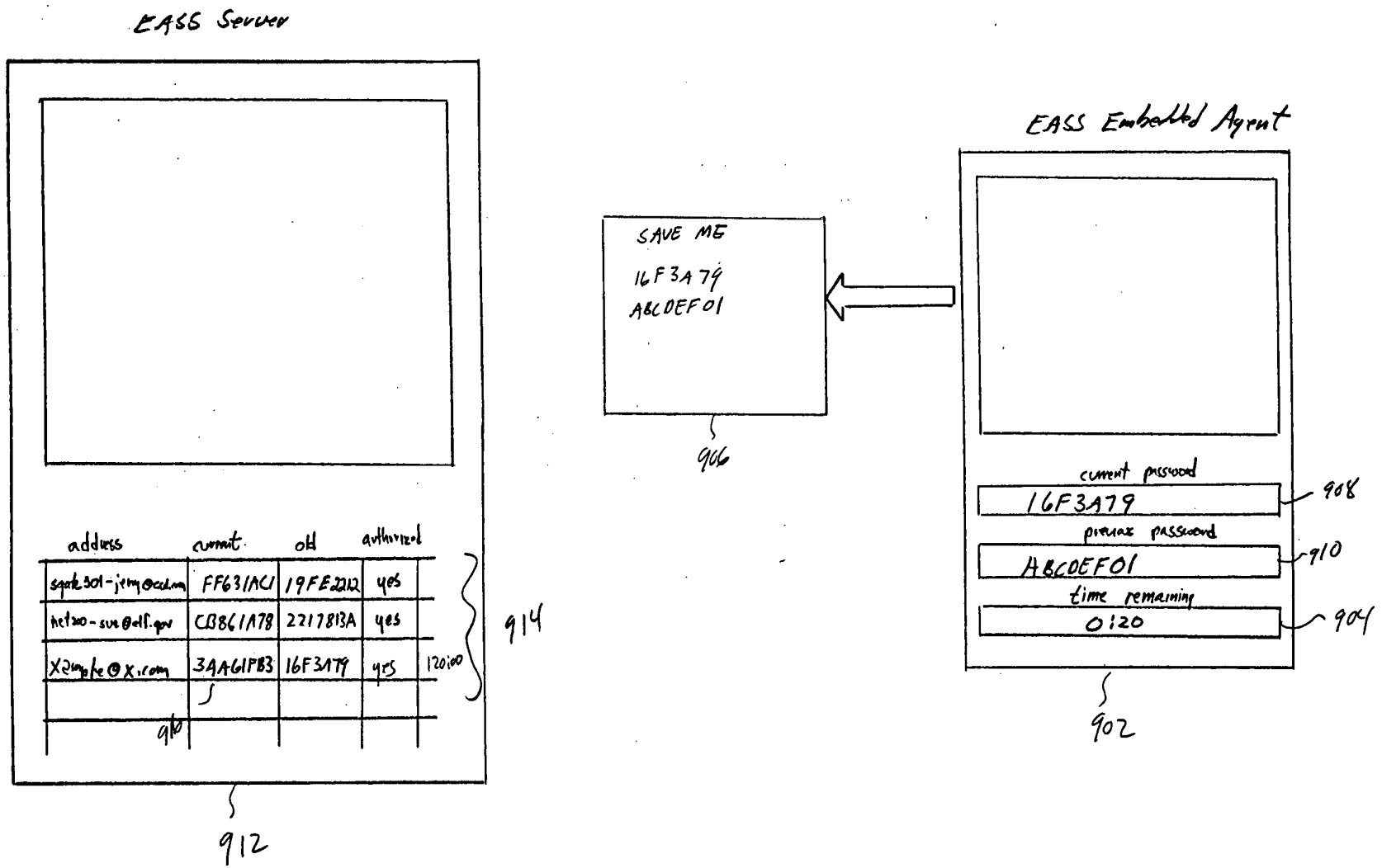
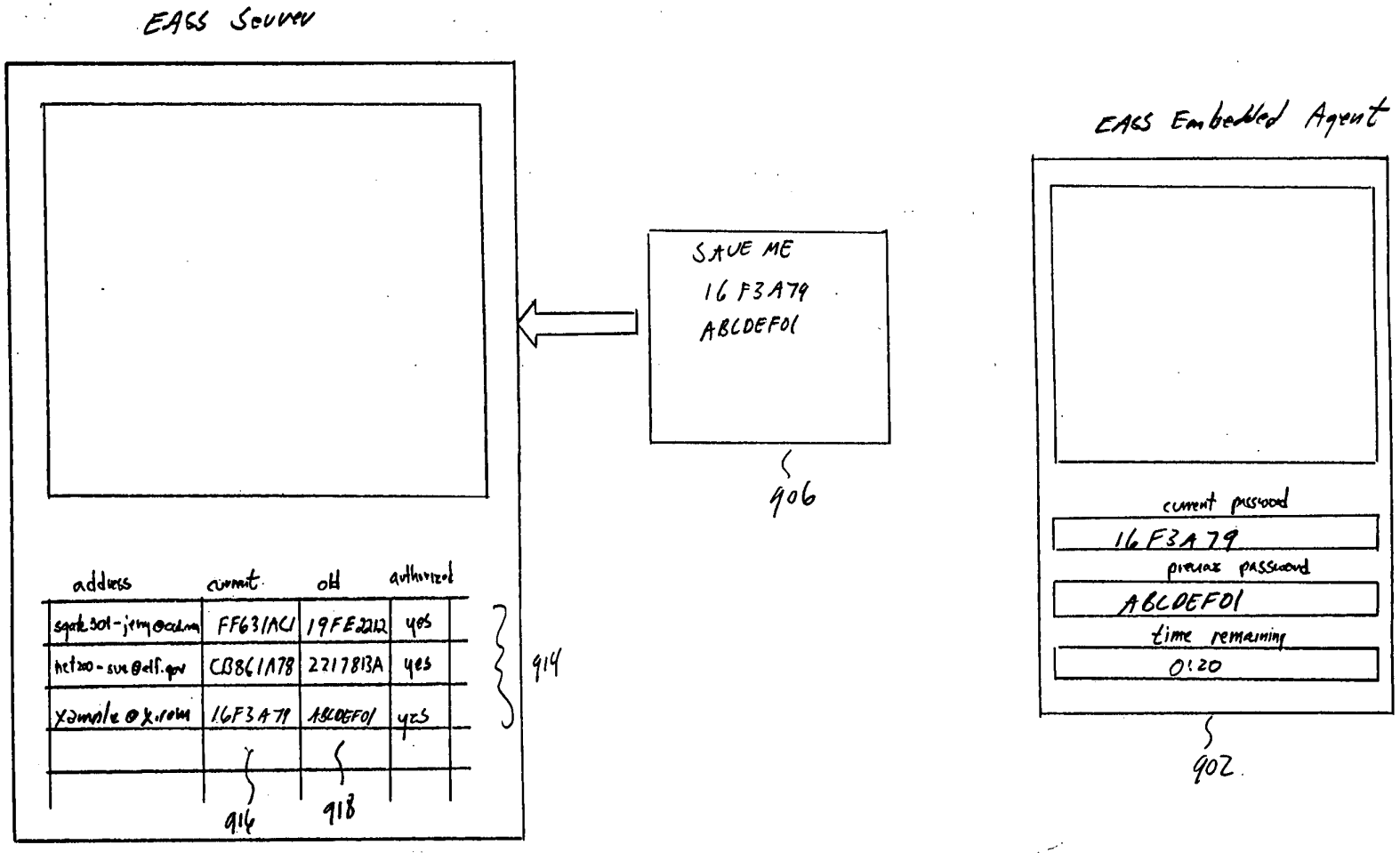
EAGS Embedded Agent

current password
3AAG1FB3
822

previous password
16F3A79
824

time remaining
120:00

866260 "60E9T60



09163094 .092998